



STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
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June 12, 2002

TO: Washington State Board of Health

FROM: Carl Osaki, WSBOH Member

RE: Consideration of CR-101 for Chapters 246-290 WAC and 246-291 WAC: Group A and Group B Water Systems' Arsenic Standards

Summary

The Environmental Protection Agency (EPA) lowered the federal standards for arsenic in drinking water from 50 parts per billion (ppb) to 10 ppb for Group A public water systems, effective February 2002. EPA set a January 2006 compliance date for this rule in an effort to balance public health protection with compliance costs. Lowering the federal arsenic standard comes after years of debate over what is considered an acceptable level of arsenic in drinking water. At the state level, consideration of moving the compliance date forward for Group A public water systems and applying the federal standard to new Group B public water systems may also be contentious.

Background

The State Board of Health (SBOH) has statutory authority under RCW 43.20.050 to adopt rules to protect public water supplies. Chapter 246-290 WAC defines basic regulatory requirements to protect the public health of consumers using Group A public drinking water supplies, while Chapter 246-291 WAC applies to the smaller Group B systems. Group B water systems generally serve 2-14 connections, while Group A water systems generally serve 15 or more connections. Local boards of health may adopt rules that are more stringent than SBOH rules for Group A systems (WAC 246-290-030) and for Group B systems (WAC 246-291-030).

The federal standard for arsenic in drinking water was lowered from 50 ppb to 10 ppb for community water systems and non-transient, non-community water systems serving more than 25 people (Group A systems). The new standard has an effective date of February 22, 2002, and a compliance date of January 23, 2006, to balance public health protection with compliance costs. EPA estimates that the average annual costs for community water systems that exceed the 10 ppb and are required to treat their water range from approximately \$6,400 to more than \$1,300,000, for the largest systems. The average annual cost per household is estimated to range from \$.86 for households on the larger systems to \$327 on the 25-person systems.

Studies have linked long-term exposure to arsenic in drinking water to cancer of the skin, bladder, lungs, kidney, nasal passages, liver, and prostate. Non-cancer effects of ingesting arsenic include

cardiovascular, pulmonary, immunological, neurological, and endocrine (e.g., diabetes) effects. (See EPA "Technical Fact Sheet: Final Rule for Arsenic in Drinking Water Standards" attached.)

Lowering the maximum contaminant level for arsenic in drinking water presented public health and political challenges at the federal level. The new federal standard comes after years of debate over what is considered an acceptable level of arsenic in drinking water. EPA received comments from more than 1,100 stakeholders. Public health advocates Mohammad N. Akhter, MD, MPH, the Natural Resources Defense Council, and Senator Barbara Boxer recommend an arsenic standard lower than 10 ppb (The Nation's Health, December 2001/January 2002).

At the state level, consideration of moving the January 2006 compliance date forward for Group A systems and applying the standard to new Group B systems also presents public health and political challenges. Department of Health (DOH) staff asked to present to SBOH issues surrounding consideration of initiating the rule making process for adopting the new federal arsenic standards of 10 ppb for Group A public water systems and applying the 10 ppb standard to new Group B public water systems. DOH staff will present information, answer questions, and request that the Board initiate rule making for Group A and Group B water systems.

According to DOH staff, Whatcom and Snohomish local boards of health are considering adopting rules lowering arsenic standards for Group B water systems, and Skagit County has asked for state leadership in applying the 10 ppb standard to new Group B systems. If new Group A systems are approved at the 50 ppb arsenic standard DOH will be faced with difficulties enforcing new systems' compliance with the 10 ppb standard in 2006. DOH estimates that the cost for Group A systems to install arsenic removal treatment technologies ranges from \$10,000 to \$30,000.

Discussions of arsenic standards for drinking water occur as part of addressing overall arsenic exposure. Arsenic exposure from soil, smelter and mining releases, treated lumber used for playground equipment and decks has been a focus of public health agencies and the news media.

Recommended Board Motion:

The Board assigns me as the rule sponsor to work with Department of Health to identify issues pertaining to lowering the arsenic standard for Group A and new Group B public water systems to 10 ppb.

The Board directs its Executive Director to issue a CR-101 for chapters 246-290 WAC and 246-291 WAC to consider whether to adopt the federal arsenic standard of 10 ppb for Group A and new Group B public water systems, and to include adopting the federal Long-Term 1 enhanced Surface Water Treatment Rule in Chapter 246-290 WAC by reference.

Attachment